Environmental Management Systems: A Tool to Achieve Compliance

Presented by...

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A Common Goal and Concern

- **Executive Order 13148, issued April 22, 2000, states that all Federal facilities must have an environmental management system in place by December 2005**

- **Increasing emphasis on verifying and improving environmental compliance at Federal facilities**

Chart 2

Root Causes of Compliance

- **Typical compliance finding action would be to ADD the label**

- **The EMS approach will address WHY the drum does not have a proper label and correct the root cause, OR eliminate the drum altogether**

Chart 3

National Park Service Response

- **Task Group formed in 2002**
- **February '04, the National Park Service began deploying its "Model EMS"**
- **The "Model EMS" is based on the elements of the international standard ISO 14001**
- **Deployment is largely park-based emphasis initiated with a central training session**
- **Template tools are emerging**

Chart 4

National Park Service Pilots

- **In 2003, seven pilot environmental management system deployments were initiated in different regions**

- **Intermountain Region highlighted an extended version which resulted in the first national parks to receive international certification to the requirements of ISO 14001…**
  - San Antonio Missions National Historical Site
  - Dinosaur National Monument

Chart 5

National Park Service Compliance

- **From 2000-03, a baseline environmental compliance audit was conducted at all national parks**

- **Findings were evaluated and the emphasis shifted to compliance improvement**

Chart 6

National Park Service EMS

- **The focus of the "Model EMS" is environmental compliance improvement**
- **For the Intermountain Region, additional emphasis is…**
  - Use of pollution prevention as means of change and compliance avoidance
  - Use of online tools to monitor environmental compliance at the facility level
  - Use of online tools to improve regulatory knowledge at facility through experience and training

Chart 7

General Experience to Date

- **It is too early to say much about the "EMS Model" from a national perspective**

- **However, specific conclusions have been determined from the experiences within the Intermountain Region**

Chart 8

Intermountain Region Experience

- **The Intermountain Region has 81 park units**

- **Of these 81 park units, three units embarked on an EMS in early '03**

- **In addition, 15 other park units began implementation of an EMS in late '03**

Chart 9

Intermountain Region Experience, '03

- **Of the three early pilot parks…**
  - Two went on to receive international registration of meeting ISO 14001 clauses
  - One (Grand Canyon National Park) passed the conformance audit but decided NOT to have international certification
- **Implementation status of all three parks was determined by an international ISO 14001 registrar and independent auditors using international protocols**

Chart 10

Intermountain Region Experience, '04

- **Fifteen additional park units are progressing through the implementation process**
- **Over 90% of these parks have expressed an interest to pursue international certification against all clauses of ISO 14001**
- **All park units are using streamlined online tools to assist in deployment**

Chart 11

Intermountain Region Compliance

- **Of the 18 national parks that embarked on implementation of an EMS, all had received a compliance baseline audit**

- **"Latency" time for closing findings after baseline audit was greater than 24 months**

- **Response time after EMS implementation began was less than 60 days**

- **All 18 park units closed 100% of their findings within 90 days**

Chart 12

Intermountain Region Compliance

- **Over 60% (est.) of the 18 park units used some form of pollution prevention change to avoid future reoccurrences**

- **Nearly every park included employee level training as part of their EMS to improve "competency" and reduce compliance concerns**

Chart 13

Intermountain Region Managers

- **Every successful EMS implementation in '03 and so far in '04 had strong senior manager (superintendent) backing**
- **Every successful EMS implementation resulted from interdisciplinary team participation**

Chart 14

Intermountain Region Resources

- **Average implementation time for the 18 park units was 60 days, regardless of park unit size or employee count**
- **On-park labor for implementation averaged (est.) less than 120 labor hours**

Chart 15

ISO 14001 Environmental Management System — Overview

The version implemented in Intermountain Region, '03-'04

Based on "EMS Model"

Augmented with tools, training, and technical assistance

National "Model EMS"

- **Based on international standard ISO 14001**
- **Park answers 16 topical questions**
- **Completion of questions leads to EMS**

Chart 17

Based on 5 Elements of ISO 14001

Chart 18

With an Added Sixth Element

- **Getting started on a new emphasis in park units that are already over loaded, short handed, and engaged in supporting the unit's missions — IS DIFFICULT**

- **Experience has shown that if the start is presented in a simple, packaged, easy-to-understand manner, the odds are it will work**

Chart 19

With an Initial Sixth Element

- **The "getting started" element includes…**
  - Directed superintendent commitment
  - Establishing an interdisciplinary team
  - Clearly setting boundaries for the EMS
  - Identifying all centralized operating locations within the EMS boundaries
- **A key concern is to communicate the total commitment to the superintendent BEFORE the process begins**

Chart 20

Environmental Policy

- **Also known as the park Commitment Statement**

- **Every park develops an environmental policy, building on the Intermountain Region environmental policy**

- **The required elements of ISO 14001 are included, as are regional and local park commitments**

Chart 21

Green Purchasing Policy

- **Every park also develops a "green purchasing" policy to…**
  - Reduce and, where possible, eliminate use of hazardous materials
  - Hazardous products acquired only through specific approval
- **Intermountain Region has established a definition for a "green" product and provides access to a database of "green" products**

Chart 22

EMS Aspects

- **Every park identifies all "aspects" that does, or could under emergency situations, impact the environment**

- **Only those that the park unit has direct control over are initially included**

- **The aspects are documented and periodically reviewed**

- **Parks are encouraged to keep it simple at this point**

Chart 23

EMS "Planning" Impacts

- **All aspects are evaluated for environmental impact "significance"**
- **Those that have significant impacts, are further prioritized for specific management attention**
- **Determining significance and prioritized aspects are left to the park, but the process must be documented**

Chart 24

EMS "Planning" Significant Aspects

- **All aspects with prioritized "significance" becomes known as a "significant aspect"**

- **All significant aspects result in carefully developed environmental management plan (EMP)**

- **All approved EMPs become a focused emphasis for the park**

Chart 25

EMS "Planning" Compliance

- **For parks with unresolved compliance findings, they typically will declare them "significant" aspects**

Chart 26

EMS "Planning" EMPs

- **Each EMP has a statement of "objective" of what the superintendent wishes to have accomplished**

- **Each statement of objective is supported with intermediate "targets"**

- **The objective and targets all have completion dates and are quantifiable and measurable**

Chart 27

EMS Compliance EMPs

- **For many parks, at least one EMP is based on environmental compliance improvement**

- **Other park EMPs address continued environmental compliance**

Chart 28

EMS "Planning" Requirements

- **All parks must identify the environmental requirements imposed on their operations. These include…**
  - Federal and state environmental regulations
  - Executive orders
  - Health and safety regulations and requirements
  - National and regional policies
  - Local permits, licenses, etc.

Chart 29

EMS Beyond Compliance

- **Parks with no outstanding compliance issues are encouraged to explore "sustainable" objectives**

- **Going beyond compliance may involve stakeholders and community partners**

- **Establishing realistic and measurable objectives is critical**

Chart 30

EMS Implementation

- **All parks have a controlled document management process**

- **All parks have a record keeping management process**

- **All parks have internal tools to communicate their EMS program to all employees**

- **All parks have a process defined for external communication**

Chart 31

EMS Implementation Emergencies

- **All parks identify potential emergency conditions as part of their EMS**

- **Emergency response preparedness is an important outcome of this step**

San Antonio Missions National Historical Park

Environmental emergency, call...

911

or, (210) 534-8833

Chart 32

EMS Implementation of EMPs

- **Implementation often results in specific procedures and work instructions**
- **Often an EMP could include special training**

Chart 33

EMS Checking & Corrective Actions

- **Implementation of all approved EMPs are routinely monitored for planned progress**
- **Changes are addressed if progress is not achieved**

Chart 34

EMS Checking & Corrective Actions

- **The entire park EMS is periodically evaluated to determine conformance with all ISO 14001 clauses**

- **Corrective actions are addressed to improve the management system**

Chart 35

EMS Management Review

- **A management review meeting is conducted after the internal conformance audit**

- **Changes are identified and corrective actions are prepared to continue to make the system appropriate and adequate for the park**

Chart 36

Facility Recognition

EMS Recognition

- **Recognition is EXTREMELY important to park units…**
  - International certification
  - Regional and national publications
  - EPA's National Environmental Performance Track
  - State environmental leadership programs

Chart 38

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Chart 39

Companion Tools

- **Green Purchasing Program to stop the flow of undesired hazardous products**

- **HazCom Train-the-Trainer Program to better equip park-level personnel to train employees**

- **Hazardous Materials Cleanout to safely remove obsolete "legacy" hazardous materials**

Chart 40

Companion Tools

- **Pollution prevention measures pre-associated with specific land management agency "activities"**

- **Local audit tools for park personnel to discover regulatory requirements and measure compliance**

- **Self audit tools for parks to conduct facility-wide audits of environmental compliance status**

Chart 41

Companion Tools

- **Online tools to streamline implementation and ensure full conformance with ISO 14001 clauses (requirements)**

Chart 42

Self Declaration

- **Many parks will not move to international registration**

- **The environmental management systems will be evaluated by an independent, second party**

- **The Federal Environmental Executive Self-Declaration criteria is fulfilled**

Chart 43